

Rabbit Anti-Filaggrin antibody

SL6327R

Product Name:	Filaggrin
Chinese Name:	丝聚蛋白/中间丝相关蛋白抗体
Alias:	FLG; Epidermal filaggrin; Filaggrin precursor; Fillagrin; Profilaggrin; FILA_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections
	need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	447kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Filaggrin:21-150/4061
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	The protein encoded by this gene is an intermediate filament-associated protein that aggregates keratin intermediate filaments in mammalian epidermis. It is initially synthesized as a polyprotein precursor, profilaggrin (consisting of multiple filaggrin units of 324 aa each), which is localized in keratohyalin granules, and is subsequently proteolytically processed into individual functional filaggrin molecules. Mutations in this gene are associated with ichthyosis vulgaris.[provided by RefSeq, Dec 2009].

Function:

Aggregates keratin intermediate filaments and promotes disulfide-bond formation among the intermediate filaments during terminal differentiation of mammalian epidermis.

Tissue Specificity:

Keratohyalin granules.

Post-translational modifications:

Filaggrin is initially synthesized as a large, insoluble, highly phosphorylated precursor containing many tandem copies of 324 AA, which are not separated by large linker sequences. During terminal differentiation it is dephosphorylated and proteolytically cleaved. The N-terminal of the mature protein is heterogeneous, and is blocked by the formation of pyroglutamate.

Undergoes deimination of some arginine residues (citrullination).

DISEASE:

Defects in FLG are the cause of ichthyosis vulgaris (VI) [MIM:146700]; also known as ichthyosis simplex. Ichthyosis vulgaris is the most common form of ichthyosis inherited as an autosomal dominant trait. It is characterized by palmar hyperlinearity, keratosis pilaris and a fine scale that is most prominent over the lower abdomen, arms, and legs. Ichthyosis vulgaris is characterized histologically by absent or reduced keratohyalin granules in the epidermis and mild hyperkeratosis. The disease can be associated with frequent asthma, eczema or hay fever.

Defects in FLG are a cause of susceptibility to dermatitis atopic type 2 (ATOD2) [MIM:605803]. Atopic dermatitis is a complex, inflammatory disease with multiple alleles at several loci thought to be involved in the pathogenesis. It commonly begins in infancy or early childhood and is characterized by a chronic relapsing form of skin inflammation, a disturbance of epidermal barrier function that culminates in dry skin, and IgE-mediated sensitization to food and environmental allergens. It is manifested by lichenification, excoriation, and crusting, mainly on the flexural surfaces of the elbow and knee.

Similarity:

Belongs to the S100-fused protein family.

Contains 2 EF-hand domains.

Contains 23 filaggrin repeats.

SWISS:

P20930

Gene ID:

2312

Database links:

Entrez Gene: 2312Human

Entrez Gene: 14246 Mouse

Omim: 135940Human

SwissProt: P20930Human

SwissProt: P11088Mouse

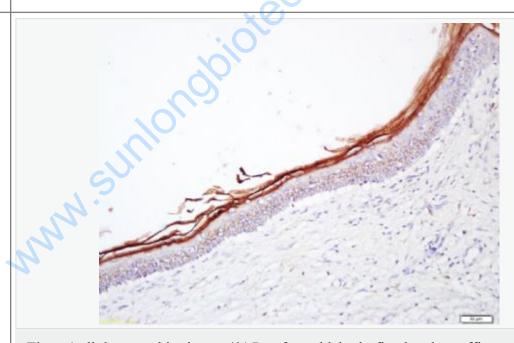
Unigene: 654510Human

Unigene: 162684 Mouse

Unigene: 439710Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

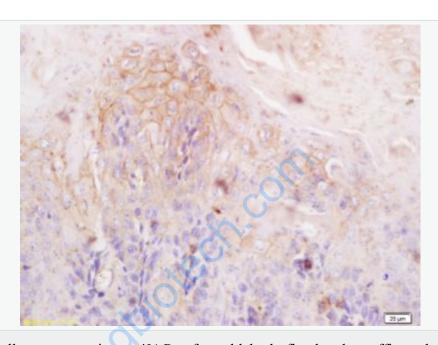


Picture:

Tissue/cell: human skin tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-Filaggrin Polyclonal Antibody, Unconjugated(SL6327R) 1:500,

overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat tongue tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-Filaggrin Polyclonal Antibody, Unconjugated(SL6327R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining